

CLAIMS

1. A method of allotting pattern units of an overall coding pattern in an information management system, in which each pattern unit has a unique pattern address, said method comprising:

receiving an allotment request for a number of pattern units;

searching an electronic representation of said overall coding pattern to locate said number of pattern units available for allotting;

setting a state indicator of said number of pattern units in said representation to indicate an allotted state; and

outputting an indication of the pattern addresses of said number of pattern units.

2. The method of claim 1, wherein the pattern units are defined in an ordered sequence by the pattern addresses, said searching comprising: locating said number of pattern units as consecutive pattern units in said ordered sequence.

3. The method of claim 1 or 2, wherein said pattern units are divided into ordered groups, said searching comprising: locating said number of pattern units within one of said groups.

4. The method of any preceding claim, further comprising: selectively changing the state indicator of at least one pattern unit from the allotted state to a released state.

5. The method of claim 4, wherein said changing is effected based on an elapsed time since the state indicator was set to the allotted state.

6. The method of claim 4 or 5, wherein said changing is effected based on receipt of a request for release.

7. The method of any one of claims 4-6, wherein said released state indicates that the pattern unit is available for allotting.

8. The method of claim 7, wherein said released state indicates that the pattern unit is available for allotting a predetermined time after the state indicator was set to the released state.

5 9. The method of any one of claims 4-8, wherein said searching is at least partly based on the state indicator.

10 10. The method of claim 9, wherein said searching comprises a re-use step in which searching is effected among pattern units with the state indicator in the released state.

15 11. The method of claim 10, wherein said searching comprises, if the re-use step is unsuccessful: locating said number of pattern units among previously non-allotted pattern units in said representation.

12. The method of any preceding claim, further comprising: selectively changing the state indicator of at least one pattern unit from the allotted state to a locked state.

20 13. The method of claim 12, wherein said locked state indicates that information relating to the pattern unit is to be blocked from being transferred in said information management system.

25 14. The method of claims 12 or 13, further comprising: selectively changing the state indicator of at least one pattern unit from the locked state to the allotted state.

30 15. The method of any one of claims 12-14, further comprising: selectively changing the state indicator of at least one pattern unit from the locked state to a released state.

16. The method of claim 15, wherein said changing is effected based on an elapsed time since the state indicator was set to the locked state.

35 17. The method of claims 4, 12, 14 or 15, wherein said changing is effected based on receipt of a request

for state change indicating the pattern address of each pattern unit to be affected.

18. The method of any previous claim, wherein said searching is effected in a data structure containing at least part of the electronic representation, said data structure comprising a set of records, each record comprising a pattern address field and a state indicator field.

19. The method of claim 18, wherein each record represents one allotment request.

20. The method of claim 18, wherein each record represents pattern units that have been allotted to a set of pages of an electronic document.

21. The method of claim 19 or 20, wherein each record comprises a field that indicates the number of allotted pattern units.

22. The method of claim 18, wherein each record represents one pattern unit.

23. The method of any one of claims 18-22, wherein said setting of the state indicator comprises deleting a record from said data structure.

24. The method of any one of claims 18-23 in combination with any one of claims 4-11, wherein the representation comprises an ordering of the pattern units as defined by the pattern addresses, said method further comprising: locating, in said data structure, records that have both a state indicator field in the released state and adjacent pattern addresses in said ordering, and merging such records.

25. The method of any previous claim, further comprising: deriving at least one destination indicator from said allotment request, and storing the destination indicator in association with the pattern addresses of said number of pattern units.

26. An arrangement for allotting pattern units of an overall coding pattern in an information management system, said arrangement comprising:

a storage which contains an electronic representation of the overall coding pattern;

a first interface;

a processing unit which comprises:

5 means for receiving, on the first interface, an allotment request for a number of pattern units;

means for searching said representation in the storage to locate said number of pattern units available for allotting;

10 means for setting a state indicator of said number of pattern units in said representation to indicate an allotted state; and

means for outputting, on the first interface, an indication of the pattern addresses of said number of pattern units.

15 27. The arrangement of claim 26, wherein said system comprises a generation tool which coordinates the generation of a product with a coding layer that is based on said number of pattern units, said first interface being adapted for communication with said generation tool.

20 28. The arrangement of claim 26 or 27, further comprising a second interface, wherein the processing unit comprises means for receiving, on the second interface, a request for state change indicating the pattern address of each pattern unit to be affected.

25 29. The arrangement of claim 28, wherein data is selectively transferred in said system to a plurality of destination units, said second interface being adapted for communication with the destination units.

30 30. The arrangement of any one of claims 26-29, wherein the processing unit further comprises means for receiving, on the first interface, at least one data identifier which is associated with the allotment request; and means for storing the data identifier in
35 said representation in association with said number of pattern units.

31. The arrangement of claim 30 in combination with claim 28 or 29, wherein the processing unit further comprises means for receiving, on the second interface, a data identifier request indicating at least one pattern address; means for identifying a data identifier in said representation based on the pattern address; and means for outputting, on the second interface, the thus-identified data identifier.

32. The arrangement of any one of claims 26-31, wherein the processing unit further comprises means for selectively changing the state indicator of at least one pattern unit from the allotted state to a locked state.

33. The arrangement of claim 32, wherein the locked state indicates that information relating to the pattern unit is to be blocked from being transferred in said system.

34. The arrangement of claim 32 or 33, wherein the processing unit further comprises means for selectively changing the state indicator of at least one pattern unit from the locked state to the allotted state.

35. The arrangement of any one of claims 26-34, wherein the processing unit further comprises means for selectively changing the state indicator of at least one pattern unit to a released state which indicates that the pattern unit is available for allotting.

36. The arrangement of any one of claims 26-35, wherein the processing unit further comprises means for receiving, on the first interface, at least one destination indicator; and means for storing the destination indicator in association with the pattern addresses of said number of pattern units.

37. The arrangement of claim 36, further comprising a third interface, wherein the processing unit comprises means for receiving, on the third interface, a destination indicator request indicating at least one pattern address; means for identifying a destination indicator in said representation based upon the pattern address; and

means for outputting, on the third interface, the thus-identified destination indicator.

38. The arrangement of claim 37, wherein said system comprises a flow controller which directs data associated
5 with at least one of said pattern units to one of a plurality of destination units, said third interface being adapted for communication with said flow controller.

39. An information management system, comprising a
10 generation tool which coordinates the generation of a product with a coding layer that is based on a number of pattern units; a flow controller which directs data recorded by an electronic pen on the product to one of a plurality of destination units, said data being asso-
15 ciated with at least one of said number of pattern units; and the arrangement of any one of claims 26-38 which communicates at least with the generation tool.

40. A method in an information management system which controls the flow of data from an electronic pen to
20 one of a plurality of destination units, said data being associated with a position-coded product, said method comprising: allotting at least one pattern unit of an overall coding pattern for the generation of said position-coded product; selectively setting a state
25 indicator for each allotted pattern unit to indicate one of a plurality of states; and controlling the flow of data in said system at least partly based on the state indicator.

41. The method of claim 40, wherein said state
30 indicator is indicative of an allotted state, to signify that any data associated with the allotted pattern unit is enabled for transmission to said one destination unit.

42. The method of claim 41, wherein said state
indicator indicative of an allotted state is associated
35 with a destination indicator, said destination indicator being indicative of a communication address of said one destination unit.

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43. The method of any one of claims 40-42,
comprising irreversibly blocking any data associated with
the allotted pattern unit from transmission to said one
destination unit by setting said state indicator to
5 indicate a released state.

44. The method of claim 43, wherein the allotted
pattern unit, in said released state, is made available
for further allotting.

45. The method of any one of claims 40-44,
10 comprising reversibly blocking any data associated with
the allotted pattern unit from transmission to said one
destination unit by setting said state indicator to
indicate a locked state.

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